

Title (en)
FERRITE HEAT RESISTANT STEEL

Title (de)
HITZEBESTÄNDIGER FERRITSTAHL

Title (fr)
ACIER FERRITE RÉSISTANT À LA CHALEUR

Publication
EP 2157202 B1 20170712 (EN)

Application
EP 08764663 A 20080526

Priority
• JP 2008059630 W 20080526
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Abstract (en)
[origin: EP2157202A1] There is provided a heat resistant ferritic steel, excellent in the weld crack resistance of the HAZ and creep strength. A high-Cr heat resistant ferritic steel is characterized by consisting of, by mass%, Si: more than 0.1% and not more than 1.0%, Mn: 2.0% or less, Co: 1 to 8%, Cr: 7 to 13%, V: 0.05 to 0.4%, Nb: 0.01 to 0.09%, either one or both of Mo and W: 0.5 to 4% as a total, B: 0.005 to 0.025%, Al: 0.03% or less, and N: 0.003 to 0.06%, and containing C in an amount satisfying Expression (1), the balance being Fe and impurities, and O, P and S as impurities being such that O: 0.02% or less, P: 0.03% or less, and S: 0.02% or less, respectively, $0.005 \leq C \leq \frac{5}{3} \times B + 0.085$ in which C and B represent the content of each element (mass%). Furthermore, the high-Cr heat resistant ferritic steel may contain one or more kinds selected from the group consisting of Nd, Ta, Ca and Mg.

IPC 8 full level
C22C 38/00 (2006.01); **C22C 38/38** (2006.01)

CPC (source: EP KR US)
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